

LAC BUREAU FINANCIAL AND ECONOMIC VIABILITY ANALYSIS FOR THE DEVELOPMENT CREDIT AUTHORITY (DCA) PORTFOLIO GUARANTEE FOR ECOLOGIC ENTERPRISE VENTURES

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Portfolio Guarantee for EcoLogic Enterprise Ventures

The Development Credit Authority (DCA) of USAID is evaluating a non-profit enterprise EcoLogic Enterprise Ventures (EEV) located in Cambridge, Massachusetts as a candidate for participation in the DCA portfolio guarantee program. EEV operates as a "green" or ecologically enhancing loan fund, affording financing to eco-enterprises located in environmentally sensitive areas of Latin America. EEV is developing a portfolio of loans from \$10,000 to \$200,000 targeted to small-scale producer organizations. EEV's objective supports goals shared by USAID and other ecologically aware organizations. These common goals — biodiversity, conservation and grassroots economic development — are achieved through support of production of exportable high-quality agricultural related products. EEV prefers to supply businesses that are 1) located in and around protected terrestrial, coastal, and marine habitats; and 2) are unable to secure financing from conventional commercial sources due to their small size, lack of collateral or operating history, and the financial risks associated with the locale.

EEV is a non-profit founded in the fall of 1999 and serves as a 509(a)(3) supporting organization of its parent, the EcoLogic Development Fund (EcoLogic), a 501(c)(3) non-profit corporation. Founded in 1993, EcoLogic provides technical and financial assistance to local non-profit organizations working to conserve biodiversity. EcoLogic has served as an incubator to the EEV green fund which is now in a growth stage with gross loans of \$1,721,796 as of year end 2002.

This paper will concentrate on EEV and a representative sample of the countries this non-profit works in and the sectors it has addressed in those countries. Finally the paper will look at cash flows of three transactions that are on the books of EEV. We should mention briefly the DCA program of USAID, which has identified EEV as a candidate for its program. After a thorough examination of a financial institution — whether a bank, a leasing company or, in this case, a fund — DCA may decide to add its guarantee to a portion of the portfolio of this institution as long as the transaction fits certain agreed parameters. Guarantees are extended up to 50 percent of each loan covered by the program. The financial institution is not the borrower, but rather a partner to USAID and facilitator in the credit origination and monitoring process lending to borrowers whose activities further USAID goals and objectives. Thus, the attributes of good management and portfolio quality are paramount in the evaluation of the financial intermediary that receives the partial portfolio guarantee.

A. Specific Market Imperfections in Southern Mexico, and Central and South America

Market imperfections can be defined as barriers to production of EEV goods and services that are in demand or could be in demand in the marketplace. For example, EEV addresses barriers faced by rural producer groups for coffee, a primary crop. Barriers to coffee production are similar to those of other crops and sectors. Barriers or imperfections can broadly be summed up as: (a) a shortage of short-term and term capital finance for the producer involved in growing/gathering linked to the export cycle; (b) vulnerability to world commodity price cycles for non-high-value pure commodity crops (highlighted by the recent dramatic drop in prices for coffee); (c) local middlemen who pay low market prices below cost of production to producers as crops are gathered and sold; (d) lack of fully profitable access to world class importers for

firm contracts of sale and technical support; (e) lack of sophistication regarding finance, trade and export/customs practices. Coffee is not the only area of focus and as we will see there is need for working capital and capital goods finance in other sectors such as certified timber, ecotourism and fisheries.

A1. Mexico

Mexico is a good country to start in examining individual countries where EEV operates. Mexico has at present the largest portion of the EEV portfolio with \$524,000 currently outstanding in eight loans. The area of interest in Mexico is in the southern quarter, including the states of Chiapas, Quintana Roo and Veracruz. The privatization of the Mexican government in the late 1980s withdrew the support of the government from the agricultural sector and the results were catastrophic to many of the producers who suddenly had to find other sources of finance and buyers for their crops. In addition, the ruling party politically drove the agro-lending by the Mexican government; and in many cases loans were never repaid thus creating a very dangerous credit culture for some of the producer growers.

Coffee Sector

On top of the market structural problems has come the catastrophic drop in world commodity price of coffee. In one period (2000-2001) the commodity price of arabica coffee dropped from 94 cents a pound to 48 cents. Mexican government efforts to find solutions, which included price stabilization funds, were to no avail. Many growers left the land for other jobs, or resorted to non-ecologically beneficial activities such as cattle rising, or slash and burn agriculture. Even the producer organizations that include 190,000 of the 280,000 growers were in general in the position of being able only to sell commodity coffee prices as low as 50 cents when the cost of production was closer to 75 cents per pound. There was no finance, no viable governmental support. Banks were afraid to lend to poorer campesinos even though they had gathered into viable cooperatives. The major exception to this grim picture for the campesinos was in areas where organic coffee was sold to ecologically active first world importers certified as Fair Trade or Organic products against fixed price dollar contracts. We will examine this market later in regard to EEV.

Certified Timber Sector

Also in Mexico's timber market, imperfections exist as they do elsewhere in Latin America. For example, in Quintana Roo province, a timber cooperative of mestizos have a harvesting program and need finance to get tropical woods from logging areas to processing plants and on to the market with the best financial return. The market for mahogany in log form is low and their returns less attractive than if it can be sawed into timber. Here capital is often needed in the form of an on-site saw mill so wood can be processed in the forest and shipped immediately upon order. Revenues come not in steady form, but when shipments under dollar contracts are made short-term finance for harvesting and inventory is often hard to obtain.

Fisheries Sector

Fisheries such as in Mexico have market imperfections as well. Unlike coffee, there is very often short-term financing by buyers of lobster and, in some cases, other fish. Lobster is sold in fixed price for dollars. This industry is capital intensive and requires longer-term finance in many cases for eco-friendly four-stroke outboard engines as well as processing plants on the beach as

close as possible to where the catch is landed. Generally, firm dollar contracts are in place with first world buyers, but finance in working and capital expenditure form is quite important for fish other than lobster. Finance for this sector can come from importers and middlemen, but EEV targets the small cooperative exporter where finance is not otherwise available. For marine projects, exclusive rights similar to those of whale watchers (noted below) are granted to lobster fishermen in Baja and in the Yucatan Peninsula. These exclusive rights help assure dollar flows to repay loans. Projects as these, EEV again relies not only on its own due diligence by the projects but also the advice of the "green" organizations to furnish data in these projects which assure the lender of sustainability and exclusivity of the right to fish and the high margin nature of the product (abalone and lobster).

Ecotourism Sector

Mexico has an ecotourism project financed by EEV that includes a whale watching project in Baja California. In Belize, adjacent to the southern part of Mexico, EEV has financed a lodge deep in the heart of the rain forest. For ecotourism, there are risks such as hurricanes, or a 9/11 security crisis, which will have an immediate effect on tourist travel; such event risk cannot be hedged. In the absence of an international certification for coffee, the key element in hedging risk is by tying the project to the dollars from foreign tourists who have learned of this ecological project through advertisements and work by major green organizations such as The Nature Conservancy or Conservancy International.

A2. Nicaragua

Nicaragua has the same set of problems as Mexico in regard to its main crop, coffee. There are fewer coffee organizations in Nicaragua than in Mexico. Financial services are fragmented and unavailable to the less affluent producer. Collateral is a problem because of lack of information on land ownership due to the nearly complete lack of records on land ownership in post Sandinista times. This lack of provable title interferes with use of land as a source of collateral for loans. In Nicaragua, as in much of Latin America, warehousing is unreliable (and may not contain the goods promised) and lending against warehouse receipts can be done only with great care.

A3. Guatemala

For this country, the largest Central American economy, agriculture and primarily coffee has been key to output. Two thirds of the population are of Mayan origin living in poverty and at the margins of society. After 35 years of civil war, the Peace Accords were signed in 1996. The government is trying to implement key macroeconomic reforms in the current coffee price disaster, which has driven producers out of the market and seriously impaired the financial sector which makes finance even more difficult to achieve and creates a serious deficit internally and in the external accounts.

Guatemala has recovered from the effects of Hurricane Mitch that caused \$250 million in damages although some damage remains. Overall, the problems common to the area of Central America are lack of finance; poor support infrastructure for coffee production; government corruption; and a history of political instability, which continue to dog the country and make necessary innovative approaches to the improve the rural productive sector.

A4. Central America in General

Overall coffee price declines hit all of Central America suffering a 44 percent decline in revenue from coffee imports.

During the 1999/2000 season coffee accounted for \$1 billion or 11 percent of total export revenues. Within a year export proceeds dropped to one half of the previous year. Coffee was most important in Guatemala and Nicaragua and less so in Costa Rica.

While crops such as cocoa have had a brief jump due to producer problems in the Ivory Coast, the structural long-term cocoa market problems for resemble those of coffee. They sell into a more industrialized market to producers and have long-term dollar contracts and require working capital and term capital finance. Differentiation into organic — rather than commodity designation — is not as sharp, so certification is not as beneficial as in the case of coffee.

Market imperfections — lack of available credit; sustainable production when commodity prices are volatile; and lack of legal framework to do traditional secured lending; aggressive middlemen and out-of-date product milling equipment — are all addressed by EEV's green lending strategy described herein.

A5. Peru

Market imperfections in Peru are similar to those north of the equator. There has been substantial political instability in Peru since the early 1980s including the Shining Path rebellion that damaged the rural sector, forced financial levies on towns and growers and numerous assassinations. The banking system has undergone upheaval with the forced nationalization of banks and subsequent privatization. Sources of local bank and institutional finance for primary product producers targeted by EEV are difficult to access. Collateral in form of land deeds is hard to perfect. Overall, Peru after President Fujimori is emerging from a dark period and offers substantial promise, but past market problems similar to those in other parts of Latin America remain.

B. How EEV Addresses Market Imperfections

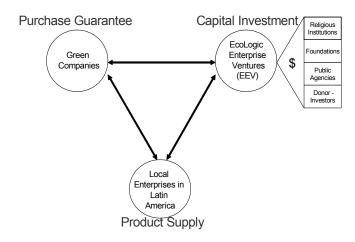
Leveraging green market linkages

Before extending credit, EEV determines that rural producer groups have established market linkages with green trading companies that can offer security enhancements to the fund. These include: creating local product demand; enhancing bankable cash flows through long-term and higher-than-market pricing arrangements; and increasing access to technical assistance that heightens borrowers' competitiveness and productivity. These companies, in turn, help bring new lending opportunities to EEV's attention.

Making Small Business Loans for Income-generating Investments

EEV's targeted loan range meets the typical needs of rural producer organizations for short-term harvest financing and general working capital, as well as longer-term loans to purchase farm equipment, expand productive infrastructure, adopt appropriate technologies, or restructure onerous debts that compromise the commercial viability of local enterprise development. These capital investments help village-based businesses add value to their production and sell goods further along the market supply chain to capture more benefits for the community.

EEV Business Model



Supply Chain

From primary producer (8) to end-user. (1) We will use coffee as an example but the idea of tapping into contractual dollar payments for goods and services is the heart of the EEV strategy to gain dollar repayment of its dollar loans to a variety of sectors.

The chain which encompasses flows of product from producer to consumer is thus useful as a point of entry of finance from various sources. It can be summarized vertically in order from highest to lowest goods move from producer to end user, and payments move from end user/retail and most importantly from the contractual party the roaster/importer (3) to cooperative/producer (7,8).

C. Supply Chain

C1. Developed Countries (United States, Europe)

- 1) End user/Consumer
- 2) Retail (supermarkets, cafes, stores)
- 3) Roaster Green Mountain Coffee roasters, Peetes, Starbucks, and others

4) Importer Cooperative Coffees (GA) Equal Exchange (MA) Organic Products Trading Co (WA)

C2. Less Developed Countries (In country)

- 5) Processor Exporter (centralized dry mill, through export services/customs)
- 6) Federation of Cooperatives (second level marketing processing)
- 7) Cooperative
- 8) Grower Members

Financial structures

EEV has developed structures designed to mitigate risks posed by lending to these untested rural producer groups. These groups heretofore had depended on the volatile commodity prices in world markets. The key to EEV strategy is that it usually targets community-based organization in these target geographic areas in need of funding. They look for organizations that already have an existing sales relationship with one or several developed major world "green" trading companies that specialize in buying certified commodity products. Examples of such products are shade managed and organically grown coffee or, in the case of timber or fisheries, products that have been awarded recognized ecological certifications. The growers/cooperatives in the developed world, would, as a result, have long-term dollar contracts at a fixed price higher than world commodity prices due to perceived quality. The objective of obtaining these higher prices is to assure the return would be sufficient to support the grower's production cycle and help the producer peasants adequately support themselves and their families with a living wage.

Security Enhancements

With these certified products, EEV negotiates security enhancements with trading companies, which minimize the risk of default by any one borrower. The growers/cooperatives, for example, have fixed term dollar contracts to deliver quality coffee in the fair trade category at \$1.26 per pound or, more likely for the U.S. buyers, coffee which is certified organic at \$1.41 per pound. This should be compared to the current 60 cents a pound price in the world market for non-specialized coffees that go into the "tin cans" in our grocery stores. By contrast, in Mexico, the producer cost is 75 cents. This lending against long-term, higher-than-world commodity prices for a premium product is an example of how EEV creates value that overcomes the market imperfections.

International Green Organizations

Many sectors/products have support from international "green" organizations, which monitor and certify the favorable ecological impact of production. Fair Trade Labeling Organization (FLO) is the international arm that stamps ecological approval on coffee and related crops. In the United States the certification agency is the Coffee Fair Trade Group that certifies that coffee is Fair Trade and if it qualifies, organic (shade grown, no pesticides) in its production. The Forestry Stewardship Council does the same for tropical woods, which are to be sold as certified as ecofriendly. The Marine Stewardship Council does the same globally for lobster and fish. These certifications are a keystone to making products eligible for premium pricing. Examples are

long-term contracts for organic coffees to a firm such as Starbucks or contracts with major lumber dealers for forest woods in the United Kingdom or United States. The international movements to promote with major importers and retailers to feature eco-friendly and certified products (reflected in the United States with Starbucks and Home Depot) are becoming a groundswell, which EEV is riding in supporting eco-friendly producer groups in Latin America.

EEV and the Green Importers

The Nature Conservancy or Conservancy International and their brethren have done their due diligence as to the eco-friendly nature of projects and financial capabilities. They have informed EEV of the viability of the project as an attractor of a reliable volume of hard currency tourists. These large "green" firms also invite EEV to furnish a portion of the financing not otherwise available.

The green importer that buys at these attractive prices however very often will not advance funds on a pre export basis; EEV will do so in a short-term loan and will be repaid later from the proceeds of the export sale to the green importer. The middlemen in-country who buy coffee at below producer cost is out of the loop as far as organic coffee and most fair trade coffees. The lack of collateral is remedied by lending against fixed dollar denominated contracts by reputable world-class green dealers primarily in the United States who agree to pay EEV through the proceeds of the export. EEV does very careful due diligence on the producers and makes sure their contracts with international buyers are in order. This "hands on" monitoring also extends to tripartite loan contracts with buyer and producer.

Extra Benefits to Producer/Grower Organizations

This lending process serves to make the cooperative or seller (parties to the EEV loan contract) understand the legal and financial ramifications and deliver to the other parties to the deal (importer, lender) financial statements and other proof of eligibility. A byproduct of this process is that the transaction will help the grower/producer evolve into a more sophisticated organization. By improving grower/producer skills in finance and trade practices, the process of arranging and servicing the EEV loan may well increase the cooperative's ability and knowledge of how to sell internationally. Another market imperfection is overcome.

Value Added by "Green Importer"

In this export process, often the green buyer may add its consulting and expertise and make it available to the producer to show how to meet problems of production/processing and shipping of primary products. Hence the problems of short-term or capital finance, technical training in production and financial management are met by the overall EEV lending model. These "green" importer/buyers are sources of technical assistance. Thus the USAID/DCA will, by its partial guarantee, allow a greater volume of carefully targeted lending with substantial ancillary benefits to the grower/seller.

Other Sectors

The process is a bit different in the eco-tourism and fishing sectors. Here government-protected mandates are the key to dependable dollar inflows. In Mexico, for marine projects, exclusive rights are granted to the fisherman who also serve as guides for first world "whale watchers." Exclusive rights are also granted by the Mexican government to lobster fishermen in Baja

California and in the Yucatan Peninsula. These exclusivity arrangements, some dating from the 1930s, help assure dollar flows to repay loans. For these projects, EEV again relies not only on its own due diligence, but also on the advice of the "green" organizations to furnish data, which assure support to the lender of sustainability and exclusivity of the right to fish, and the high margin nature of the product (abalone and lobster) or of the service (a chance to encounter whales).

D. Private Sector Financing Not Displaced

The DCA loan portfolio guarantee will not displace short-term and term debt financing for ecofriendly producer groups in Latin America that could otherwise be fulfilled from the private sector. Generally private sector financing is not available to grass roots producers in these sectors and countries. Producer groups from local banks and international funding is sporadic if done at all. The exception in regard to availability of short-term finance is lobster and fisheries. Even then, supplemental targeted financing to producers is often required. It is absolutely central to EEV's philosophy, with its limited resources, not to finance enterprises, which are already adequately financed. EEV will finance projects that have other lenders but concentrate on its specialty, which is crop and pre-export financing for the growers and their cooperatives.

We have noted the barriers in Mexico with a general lack of bank finance, which is similar to those in Central American nations. Other barriers such as prejudice by the establishment against social and racial composition of the producers make many growers non-bankable. Another barrier is the grower's perceived lack of sophistication by local authorities. Problems with land title (Nicaragua) and other barriers to collateral also keep these producer groups generally out of the financial bank arena. The growing demands for organic and eco-friendly products make finance from EEV most necessary to close the gap. Their innovative triangular arrangements through international buyers as source of repayment as well as technical support makes EEV unique and DCA support most merited.

From Chiapas to Peru, Latin America lacks the financial and technical infrastructure to support ecologically promoting and financially rewarding enterprises in this low income producer/cooperative sector serviced by EEV. This sector, sandwiched between micro finance (small loans to a myriad of generally urban enterprises) and commercial finance (to larger enterprises), is underserved

E. Guarantor of Last Resort

The DCA guarantee will facilitate the operations of EEV and allow it to multiply its operations through the 50 percent guarantee of the segment of the EEV loan portfolio covered by the guarantee. Such a guarantee does not remove risk from lenders, project sponsors and investors, buyers and producers. It only allows the lender to provide more finance to qualified producer/cooperative groups than would otherwise be possible. Under the guarantee by DCA, as a 50 percent stakeholder in each qualifying loan, EEV will absorb dollar for dollar any losses from loans, which fail to fully perform.

This guarantee will not primarily remove risk in financial transaction but allows EEV to cut a path toward more sustainable financial support for deserving eco-friendly projects and show

others in these countries and sectors how these transactions can be done successfully; this multiplier effect is a key part of the strategy. Put it another way, DCA is a catalytic agent added to the EEV model to make it move faster and do more projects in a given period of time. We must emphasize that EEV is aware of risk and how to manage it. EEV has emphasized that there will be no slackening in EEV underwriting standards. In facilitating growth, the DCA will allow EEV to cover overhead with greater revenue to be able institutionally to do more, exercise the same amount of care and oversight. The key point is that, without the DCA guarantee, the additional finance would not be made.

F. Financial Viability Analysis

F1. Borrowers Organization and Financial Profile

We will look at the organization of EEV, then treat its financial profile — assets/liabilities and profits and losses — in moderate detail. Then we will take three sample loans in different sectors and countries as examples alternative cash flows and sensitivity analysis while demonstrating repayment of EEV financing.

EEV is a non-profit that operates as a "green" loan fund, launched in late 1999 as a subsidiary to the non-profit, EcoLogic Development Fund (EcoLogic). Founded in 1993, the parent is a 501(c)(3) non-profit that provides technical and financial assistance to developing world local non-profit organizations working to conserve biodiversity through community-based development and natural resource management in Central America and Mexico. Through grant support and technical assistance, EcoLogic promotes small-scale local initiatives that strengthen communities living in and around threatened habitats to engage ecologically friendly practices. EcoLogic has provided vital support to more than 110 community groups and generated indirect benefits for 500,000 poor and indigenous people in rural areas.

In the fall of 1999, EcoLogic launched a mission-driven loan fund subsidiary. EEV was founded to provide affordable financing to eco-enterprises owned and operated by marginalized groups on Latin America, especially peasant farmers, fishermen woodsmen and indigenous people.

EEV was created as a "supporting" non-profit affiliate of EcoLogic. EEV was created under the auspices of another statute 509(a)(3) to conduct and account for the program's green lending activities separately from the parent. EEV does not count on financial support from its parent. EEV's financial operations in case of severe problems will not impact its parent due to the legal crafting of the separation of the two organizations. EEV has two board members from the parent.

F2. Financial Profile

EEV has been in business for approximately three calendar years. We have unaudited 2002 numbers which we will use to outline EEV financial status.

Table 1. EcoLogic Enterprise Ventures' Three Year Financial Summary 2002 unaudited, audited 2001 and 2000 by Sandberg, Gonzalez and Creeden, of Dedham Massachusetts, in U.S. dollars (000 omitted)

Balance Sheet	December 31, 2002	December 31, 2001	December 31, 2000	
Current Assets				
Cash and S/T	1,915	1,203	667	
Accr. Int. Rec	47	33		
Loans Rec S/T	917	649	439	
Total Current Assets	2,880	1,885	1,106	
Loans L/T	647	328	175	
PP&E (net)	3	3	1	
Total Non Current Assets	650	331	176	
Total Assets	3,530	2,216	1,282	
Liabilities				
Accrued Exp	0	28	8	
Accrued Interest Pay	15	11	0	
Notes payable current	365	175	333	
Notes Pay L/T	1,575	1,199	512	
Total Liabilities	1,955	1,413	852	
Loan Loss Reserve	377	267	90	
Perm Loan Capital	210	100	75	
Unrestricted Capital	986	436	264	
Total Net Assets	1,574	803	429	
Total Liabilities and Net Assets.	3,530	2,216	1,282	

To summarize, EEV has grown from assets of \$1,282 in 2000 to \$2,215 in 2001, and finally to \$3,530 in 2002. Short-term loans more than doubled in the three years from \$439 to \$917 and long-term loans increased from \$175 to \$647, an increase of 3.7 times. Total loans increased 150 percent from \$615 to \$1564. This growth does not take into account the \$975 in loans repaid to EEV in 2002 and total repayments of \$1,491 over the three-year period. The loan loss reserve increased by four times to \$377. Net assets in form of reserves and loan and grant capital increased over three times in the period. The loan assets were well over half short-term while funding was primarily over one year in final maturity, resulting in an asset/liability relationship where funding is longer-term than assets.

Table 2. EcoLogic Enterprise Ventures

Unaudited figures for 2002, audited for 2001 In \$US (000 omitted)

Income Statement	Calendar 2002	Calendar 2001
Financial revenue		
Interest from bank deposits	690	28
Interest from loans	149	86
Total Revenue	218	113
Financial costs		
Interest on notes	46	43
Net Financial Revenue	172	70
Personnel costs	187	127
Marketing and fundraising	10	2
Other costs	49	48
Total management costs	246	177
Total Expense	291	220
Other Revenue		
Unrestricted funds	671	394
Restricted funds	170	75
Donations	4	11
Total Funding	844	480
Operating surplus	771	374
Net Assets Beginning Year	803	429
Net Assets Year End	1,574	803

On the income side, interest on loans aggregated \$149 and interest on bank deposits contributed an additional \$69 or a total of \$218 in revenues against interest costs of funding of \$46 (average cost of funds is 3 percent against average loan interest earned of 13 percent).

Net return after financial returns and costs was \$172. Management costs in form of salaries and overhead plus minor items aggregated \$246. Net after expenses and before grant and loan inflows was a negative \$73 as opposed to a negative \$106 the previous year. This was a sign of progress as EEV upsizes, puts out more loans and takes in corresponding funding. As noted, the operating deficit was more than funded by an increase in grant income of nearly two times.

F3. Portfolio of EEV since Inception

Portfolio changes

Since launching operations in late 1999, EEV has made available a total of 34 loans with a gross value of \$3.6 million, all denominated in U.S. dollars to rural producer organizations throughout Latin America. As of January 15, 2003, EEV had \$1,721,000 outstanding up from \$1,563,000 at calendar year end 2002.

Meanwhile 15 loans totaling \$1,491,770 have been repaid in full from the earliest in February 14, 2000 for \$100, 000 to the latest \$150,000 coffee loan in Peru in November 22, 2002. All but two of these loans were financing coffee. Of the remaining loans, one financed spices in Guatemala and the other cacao in Costa Rica. This concentration on coffee in the first years of operations is evolving into increased diversification into spices, ecotourism, (lodge in Belize, whale watching in Baja California,) and marine products (fishing in Baja).

In effect 41 percent of original loans have been repaid in full. The remaining 19 loans now on the books are performing with the exception of one, OCPOL, Costa Rica which will be discussed below on page 13. This loan is a total loss but is fully reserved. Overall this paper's evaluation of lending practices and portfolio management is generally good, taking into consideration careful underwriting practices needed to address the targeted low income producers. EEV is working in a very central but difficult and risky sector of developing world rural borrowers using creative and effective financing techniques. It has had one bad loan detailed in the next section of this paper.

Returns

As noted, rates on loans normally average 13 percent against cost of funds of 3 percent from ecofriendly investors or grantors. One problem is that spread over cost of funds of a nominal 10 percent is not necessarily a per annum yield. It is valid for long term facilities. Short-term crop cycle funds may be lent for three to six months only and, if the money cannot be redeployed to other loans, it rests in money market funds (or the equivalent) barely yielding a positive carry during that time.

Hence, the emphasis on longer-term facilities or the option of a "hemisphere play" where crop cycles in Mexico are opposite those of Peru so short term funds repaid in Mexico or Central America could be relent in part at least in Peru or Ecuador as that portfolio grows.

We will examine a series of loans in different nations and sectors. We should keep in mind several factors when assessing risks:

- 1) Critical to successful lending is the expertise of EEV management, its board and investment committee. We will note that the process by which investment decisions are made are a result of detailed on-site examination by EEV staff followed by detailed loan approval memoranda. This memo is examined in detail and discussed with EEV management by a very seasoned loan committee formed of experienced and prominent businesspeople primarily in the Boston Area. (See Annex II for biographies.)
- 2) We should note that cross currency risk is rare. Transactions are made in dollars and repayment is from dollar-based contractual payments by world-class importers so no dollar versus local currency problem is likely to arise.
- The contracts against which EEV lends are for fixed prices well above world prices, in the case of fair trade coffee at \$1.26 per pound, and organic at \$1.41 per pound.

The cooperative has every incentive to honor the contract. The payment is in two parts. The first part is the EEV loan, which is approximately half of the full revenues from the contract repaid first from proceeds of export sales. For the producer the remainder of remuneration is paid after sales by the green importer. The cooperative pays its loan to EEV at a set rate of around 13 percent well below existing local bank rates in the area. Performance risk is a possible problem and will be part of any sensitivity analysis. Given the penalties for non-performance, a cooperative would try to make good on its delivery contract especially for organic crops that command a world price premium.

- Further, non-payment of the loan by the cooperative/producer would end the relationship with EEV and with the green importer/buyer. The question of character risk in lending is always real but is carefully vetted by the green importer/buyer and EEV staff make frequent on-site visits. These visits made before and in intervals after disbursement are designed to allow staff to assure themselves of the viability of the project and willingness and ability to deliver on export contract. The character of the leadership of the cooperative is key in assessing likelihood to repudiate debt even in the face of severe penalties.
- In the case of eco-tourism and marine products, there is price risk but still the lender is counting on a steady dollar income for the very rare or high-quality product or service from the cooperative. One of the cash flows shows how this works in the fishing industry.
- Event risk does happen in the form of another Hurricane Mitch, volcanic eruption, earthquake, drought, or other natural disaster; these are part of the game and cannot be hedged. Another risk would be that the world price of coffee for example rose to the fair trade price at \$1.25. While unlikely, this could happen at some juncture and cooperatives could decide to sell in the open market for 100 percent of their money rather than take half in the EEV loan and the rest upon delivery, which now is very favorable to growers. Since most growers financed by EEV use organic, that premium would still exist and it is unlikely world price would be near that level, now at \$1.41.
- Non-Performing Loan. The targeting of disadvantaged peasant farmers in remote areas of Latin America implies risk and the loan in question points up those risks which have generally been well managed by EEV. One problem has arisen is the non-performing loan to Productos Orgánicos Limitada (OCPOL), a Costa Rican subsidiary of Organic Commodity Products Inc. (OCP). OCP was a well regarded international "green" trading company based in Cambridge, Massachusetts. EEV's total financing to this project added up to a \$150,000 subordinated loan plus a \$60,000 follow on bridge financing, both loans totaling \$210,000.

OCP accessed the products of small-scale indigenous farmers growing certified organic cocoa in the jungles of southeastern Costa Rica. Previously OCP had received debt and equity financing from The Nature Conservancy as well as the MacArthur Foundation totaling more than \$2 million. Launched in 1998, OCP intended to grow quickly and become a vertically integrated

supplier of organic cocoa of a unique high quality aimed at the U.S. and European market. Additional cocoa sources came from Panama, Brazil and the Dominican Republic.

At the time, OCP was the only major player with vertically integrated operations from the grower to production in developed world (for example, it supplied chocolate for a diversified line of Newman's Own Organic chocolate products). One major gap in this vertical chain from producer to consumer was in the financial sector, for rather, the pre-export financing of the indigenous cocoa growers.

EEV saw this need and, following its philosophy that EEV's reason for being was to fill such gaps in financing, it set about to find a way to finance the primary producers coop that OCP was not financing. We should note that Archer Daniels Midland (ADM) had been financing OCP since the beginning of its operation and had a security interest in OCP's assets and equipment. It should also be noted that EEV approved its \$150,000 loan after the successful repayment of an original \$25,000 loan to OCP.

Since ADM had a senior security interest in OCP assets, EEV's loan would be classified as subordinated. Because the coop was not ready to handle the money at first, EEV's loan to the coop was passed through OCP and then to the coop. To create some carve out protection for EEV, a local bank account was opened for EEV. Then EEV fashioned a tripartite agreement to the effect that the proceeds of coop sales to OCP would go into that bank account and pay contractual debt service to EEV. As long as OCP had the means to pay for its product, it would honor obligation to channel the repayment to the cooperative to the joint EEV/coop account. Unfortunately when OCP no longer had the means to pay into the account, this "security" was not effective since it depended on OCP paying its cooperative suppliers.

Meanwhile, OCP was growing fast and was depending on a \$5 million low interest loan pledged from a mission driven investment vehicle, ABMN Resources. Unfortunately, this fund's key investor died just before injecting money into OCP, and his investment vehicle ABMN Resources was thereafter unable to come up with the money. Subsequent efforts on the part of MacArthur Foundation, Nature Conservancy, a "green" investment bank and Grey Seal ventures (run by Caroline Williams, affluent benefactress and former DLJ managing director) were unable, in a post 9/11 environment, to raise the needed equity to bring the funds in to keep OCP running. EEV had lent an additional \$60,000 as bridge financing into which seemed this sure investment by ABMN Resources. The investment as we know was cut short by the untimely death of its principal.

In November 2002, there seemed to be no viable business at OCP and ADM decided to allow OCP to go into liquidation (Chapter 7). They did not resort to Chapter 11 since with that channel there needs to be a package with lenders and viable equity holders to move the company back into the mainstream after reorganization. We should note that while the \$210,000 loan is a total loss, it will be written off against the existing \$376,000 loan loss reserve, bolstered by an additional \$50,000 increase in reserve from income. After all is done, the 10 percent loan loss reserve will be maintained at least at \$216,000 level which is slightly over 10 percent of the existing portfolio. Additional growth in asset levels implies additional loan loss reserve growth. EEV will dedicate most or all of its interest earnings from loans and investment to growing this

reserve for the foreseeable future. Note that net financial revenues in 2002 were \$172,000. Loans will be made from existing or new grants or loans from benefactors.

Sample Projects and Cash Flow Projections

To give a better idea of what EEV has been doing in its lending activities, we will examine cash flows from three projects funded by EEV, show base case projections, followed by a sensitivity analysis to show the impact of plausible adverse developments. In most cases the substantial part of prices are set by world agreements for coffee and other products. In these first two cases, ASASAPNE, located in northwestern Guatemala, and COSATIN in Nicaragua, the emphasis is on coffee. Analysis of sensitivity will more realistically examine shortfall in production/delivery with some variable costs falling in tandem with volume but fixed costs hitting the bottom line.

In the case of marine products such as Punta Agreojos located in Mexico, Baja California, prices are not fixed so we can posit a decline in price to show effect of price adversity. In all cases the projects, after sensitivity analysis, demonstrate a full and timely pay off of EEV debt. Since this is not an equity investment the financial return to EEV in any case is 13 percent coupon on their debt (cost of funds hovers around 3 percent). Since these projects are not owned by EEV we need not look into rate of return as long as the loan is paid on a contractual basis. The cooperatives' return on sales is positive in all cases.

We will describe the project and then show the result of cash flow in both base and alternate case showing results of sensitivity alterations. We will show repayment of EEV loan and a positive return to the cooperative even with reduction in sales volume or price (See Annex 1, Cash Flows).

Table 3. ASASAPNE

Scenario Results	Base Case		Alternate Case	
Percent of Production Targets	100 percent		80 percent	
Repayment of \$65,000 EEV Loan	Yes		Yes	
Net Income of Borrower	\$7,066		\$5,653	
Income Statement 12 Months to October 31, 2003				
Sales	414,874	100 percent	331,899	100 percent
Cost of Goods Sold	331,451	81 percent	259,572	80 percent
Gross Income	83,423		72,327	
Gross Margin	20 percent		22 percent	
Administrative Expenses	21,230		21,230	
Sales Expenses	54,992		43,993	
Total Operating Expenses	76,222	19 percent	65,224	20 percent
Interest to EcoLogic	3,900	1 percent	3,900	1 percent
Certification Expenses	2,815		2,815	
Total Expenses	407,808		326,426	

Scenario Results	Base Case	Alternate Case	
Net Income For Period	7,066	5,653	
Return on Sales	2 percent	2 percent	

Background and Assumptions

This project involves financing of \$65,000 for certified organic and shade grown coffee to a cooperative, ASASAPNE, operating in the forests of northwestern Guatemala. ASASAPNE has developed a plan for organic and conventional coffee production. Farmers harvest product and sell it to ASASAPNE in the January to May period. Coffee is transported, processed and exported to buyers from February to June. It is the period of time between the beginning of coffee harvest and the receipt of payment for product sales, that the coop requires working capital. Cash flow projections demonstrate that ASASAPNE will experience cumulative cash deficit of over \$40,000 through the beginning of February assuming no access to crop financing. With access to the requested \$65,000 loan from EEV, the cooperative would have sufficient working capital to finance all of its coffee purchases and operating activities in the early months of the harvest

Sales on base case show exports of 366,300 pounds of coffee in 10 containers (37,500 lbs/ container). This is equal to 3,663 quintales (qq) or (100 lb bags) after shrinkage.

ASASAPNE will ship two containers of fair trade coffee (\$1.41 lb) plus half container of fair trade coffee to Elan Organic Coffees; four fair trade (\$1.26 lb) containers to Hamburg Coffees (Germany); one specialty coffee container to CEFA (Italy) at (\$.78 lb); and two containers to Unitrade at (\$.74 lb). The base case, most likely cash flow covering the period November 2002 to October 2003, shows EcoLogic \$65,000 credit disbursed in January and repaid in full in June. For the cooperative, net income is \$7,066 on sales of \$414,874.

In the alternate case analyzing for sensitivity, we have dropped product sales by 20 percent across the board to \$331,899 including a proportional cut in fair trade and organic coffees. These two categories of coffee are the cash cows of the cooperative and ordinarily would be the last to be cut. Nevertheless with this slash in production/export, gross income drops only 13 percent as cost of goods is a variable cost. Operating expenses drop only 14 percent with administrative costs remaining fixed. Overall net income falls from \$7,066 to 5,653.

The key point is this model works even in an unrealistically adverse scenario and EEV gets repaid in full and on time and the cooperative still realizes a small net profit. The fact that EEV finances only 16 percent of the coffee allows substantial room for payment even with an unlikely drop in gross sales by 25 percent. Organic coffee world sales were \$107,000 or 25 percent of the total coffee shipped, and EEV financed only 60 percent of that.

Table 4. COSATIN (Cooperativa de Servicios Agropecuariaos)

US\$

Scenario Results	Base Case		Alternate Case	
Percent of Production Targets	100 percent		80 percent	
Repayment of \$96.500 EEV Loan	Yes		Yes	
Net Income of Borrower	123,558		91,388	
Income Statement 12 Months to October 31, 2003				
Sales				
Coffee	583,208	81%	466,567	81%
Honey	135, 000	19%	108,000	19%
Total Income from Sales	718,206		574,567	
Cost of Goods Sold				
Coffee	356,497	81%	285,198	81%
Honey	114,248	19%	91,398	19%
Total Cost of Sales	470,745		376,596	
Gross Margin	247,464	34.5%	197,971	34.5%
Financial Cost EEV Interest	7,318		7,318	
Total Financial Costs	19,289		19,289	
Total Commercial/Administrative Cost	112,593		95,270	
Total Operating Costs	131,882	19%	114,558	19%
Net Income	123,558		114,558	
Net Margin on Sales	17.2%		15.9%	

Background and Assumptions

COSATIN, located in the north-central mountains of Nicaragua, has developed a program for organic coffee and honey production. The projections cover the November 2002 to October 2003 periods, and reflect a productive cycle whereby farmers harvest organic product and sell it to the cooperative in the December to April period. Coffee and honey is transported, processed and exported to buyers from February to June. It is during the period of time between the beginning of the coffee and honey harvests and the receipt of payment for product sales that the coop requires working capital to finance coffee and honey purchases from growers and cover operating and administrative costs. EEV lent pre-export financing of \$96,500 in December 2002. In the base case scenario repayments to EEV will be made in equal monthly installments in April, May, and June 2003 of \$32,167.

COSATIN purchases enough coffee to fill 12 containers (38,000 lbs each) of fair trade organic export grade coffee (at \$1.41 per lb) up from 10 containers exported the previous year. One sixth of the volume (two containers) will be conventional coffee at \$.50 a lb. These are conservative assumptions since COSATIN believes it can sell the organic at a premium to \$1.47 per lb and the conventional coffee at least \$1.26 per lb or higher. Honey will be sold at \$1.80 per kilo, although U.S.-set fair trade prices are likely to gain \$2.00 a kilo.

Contract sales of organic coffee will be three containers to Equal Exchange of US; two containers to GEPA of Germany; three to Milka Germany; and two will be to MEIRA Finland. Sales for honey: 250 barrels will be going to importers in Germany although there are competing offers from Spain and Italy.

In the base case income from coffee and honey aggregated \$718,208 with cost of sales \$470,745 and a gross profit of \$247,464. After administrative costs of \$131,882, the net income was \$123,558, or a return of 17.2 percent on sales, with full repayment of the EEV loan.

In the alternate case scenario, we dropped production 20 percent with the same price scenario. Here gross sales fell to \$575,567; cost of sales dropped proportionally and the gross profit was \$197,971. After operating costs, which fell in tandem with the reduced throughput to a level of \$114,558, the net income was \$91,388 or a return of 15.9 percent on sales. This operation is robust and flexible enough to withstand a 20 percent drop in sales and repay debt while maintaining a double-digit return on sales.

Both honey and coffee made it to the market; the cooperative made a tidy profit and EEV will receive contractual payments as planned.

Table 5. Cooperativa Punta Abreojos

US\$

Scenario Results	Base Case		Alternate Case	
% of price targets	100 %		80%	
Repayment of EEV \$100,000 loan	Yes		Yes	
Net income of borrower	\$460,132		\$130,320	
Income statement 12 months to September 31, 2003				
Sales of abalone	897, 980		718,384	
Sales of lobster	2,560,000		2,048,000	
Sales of finned fish	561,919		449,535	
Sales of oysters	12,323		12,323	
Total ales	4,032,222	100 %	3,228,242	100%
Cost of sales	505,988	13 %	505,988	15%
Gross margin	3,526,235	87 %	2,722,255	84%
Operating costs	1,317,036		1,166,792	
Operating profit	2,147,742		1,494,006	
Operating margin	53 %		46%	
Financial expenses	67,992		67,992	
Distribution to members	1,619,618		1,295,694	
Percent Distribution to members/sales				
Net income after distribution	460,132		130,320	
Net Income to sales	11%		4%	

The Punta Abreojos project involves a fishing cooperative in Baja California Mexico. EEV will be lending \$100,000 to finance the purchase of 10 four-stroke engines that are more powerful and much more ecologically friendly, as they dump very little fuel in the water. The cash flows

assumes the cooperative will be harvesting lobster during the first five months of the period, catching abalone for the next three months and fin fish and oysters for the last four months. Processing of all products including lobsters takes place in the fishing village of Punta Abreojos.

From there, goods are transported to the port town of Ensenada an hour south of the border with the United States and sometimes to San Diego where they are sold to buyers representing customers from around the world. Due to the perishable nature of seafood products, sale occurs within days and sometime hours of the catch at prevailing market prices. According to volume and price assumptions based on past experience and market conditions, Punta Abreojos expects sales of \$4,032,222 and net income of \$460,132 by the end of the 2000–03 fishing cycle.

The assumptions include harvest of the premier crop lobster of 160 tons, plus 11 tons of abalone and 398 tons of fin fish. Abreojos conservatively averages prices of \$16 a kilo for lobster, \$80 per kilo for abalone, and \$1.41 per kilo for fin fish. These prices assume average demand in Asia for lobster and abalone. The lobster will generate \$2.56 million in gross sales with sales primarily coming in October and November. Abreojos will concentrate more on sustainable catch (abalone and lobster and less on fin fish.) With the \$100,000 loan, they will purchase 10 four-stroke engines, which is expected to cut the cost of lobster harvest by \$55,000. The loan has allowed the cooperative to install the engines September 2002. The timing of the repayment of the EEV loan has proven correct. Of the \$100,000 loan, only \$40,000 is outstanding with the January payment on its way and the final February payment of \$20,000 expected on time.

In crafting the sensitivity for this facility, we have kept volumes the same given strength of Asian and US demand for the products. Price is not set by world exchanges. Price risk for maritime catch is not hedged by above market contracts as in the case of coffee or cocoa. We are assuming in the first sensitivity analysis that volumes stay the same. We have assumed an unlikely but possible cut in prices by 20 percent if, for example, other suppliers come on stream and demand is enough to take care of the cooperatives production but at a lower price.

Thus in the alternative case cash flow we posit a price decrease of 20 percent. Cost of goods sold remains the same leaving a gross margin of 84 percent. Operating costs drop only slightly. And after final distribution to producers the net income drops to \$130,320 as opposed to the \$460,132 in the base case or a drop of 71 percent in net income. Yet the \$100,000 loan is paid on time to EEV and supplier credit is serviced. Even in this stressed case, the net income before distributions to coop members is 44 percent and after distribution is 4 percent. The project works for all parties and EEV has found its niche in financing a key component which is ecologically beneficial and more efficient, thus saving money for the cooperative.

G. Conclusions

This consultancy required a four-day visit to EEV in Cambridge, Massachusetts. During this onsite visit at their offices, I read a substantial number of loan files and background papers. I also had the chance to have several hours of discussions with Executive Director Will Foote, his assistant Jose Rojas, and Parent Managing Director Sean Paul.

The important criteria for analyzing a financial institution for a portfolio guarantee is to evaluate the institution's ability to partner with USAID/DCA in making loans, which are on target from a

development point of view, and of good quality. In short, we look at the ability of management and the quality of assets and reliability of matching liabilities.

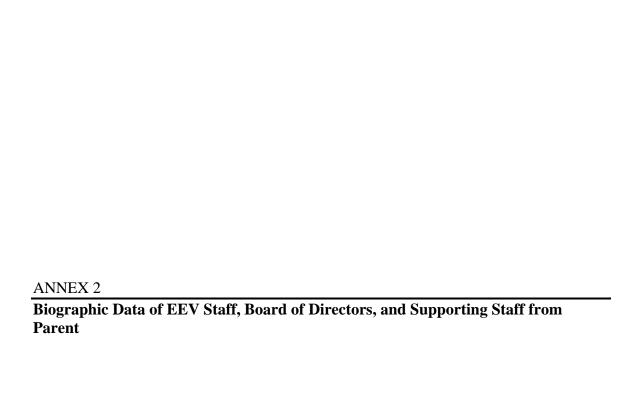
Will Foote and his staff are able and very focused on development and quality operations. Approximately half of the loans they have made since the beginning of their lending program have been fully repaid and are off the books. Now EEV is branching out into sectors other than coffee (eco-tourism, fishing, lumber), which will broaden EEV's impact on their geographic territory and target market. Despite the one bad loan, the rest of the portfolio appears to be in good shape. EEV handled this bad loan in a professional manner; they also had very well regarded partners in this venture from the investing and green importing world. This loan was not a flier but a core facility in this line of lending that went bad.

The sectors EEV lends in are risky but the development payoffs are important. EEV's operation is well organized, shows care in the extension of credit and in the marketing of the company both on the asset side and in the funding side. Will Foote and his staff are good at taking care of both sides of the balance sheet.

For these reasons, I would recommend that USAID/DCA seriously consider EEV for their portfolio guarantee program.

ANNEX 1

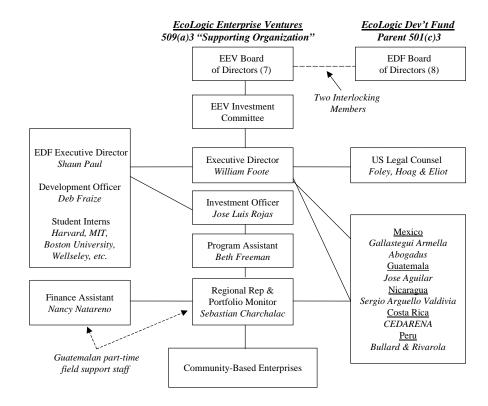
Cash Flows



Biographic Data of EEV Staff, Board of Directors, and Supporting Staff from Parent

William F. Foote, Executive Director

EEV is managed by William Foote, whose primary responsibilities include identifying and evaluating lending opportunities for review by EEV's Investment Committee; developing and managing relationships with green buyers and rural producer organizations in Latin America; providing periodic field support and supervision; managing information flows between EEV staff and the Board of Directors; and raising loan capital and grant funding to support operations. Mr. Foote has a background in cross-border investment and economic development in Latin America. Prior to founding EEV, Mr. Foote worked as a financial analyst in the Latin American Corporate Finance Group at Lehman Brothers, Inc. (1993-95); as a journalism fellow of the Institute of Current World Affairs reporting on socio-economic development in Mexico (1995-97); and as a reporter at the *Buenos Aires Herald* in Argentina (1990-92). Mr. Foote is a Boston term member of the Council on Foreign Relations and currently serves on the Board of Trustees and chairs the Finance Committee of the Institute of Current World Affairs. He holds a M.Sc. in development economics and economic history from the London School of Economics and B.A. in history from Yale University. He is fluent in Spanish and Portuguese.



José Luis Rojas Villarreal, Investment Officer

Mr. Rojas, a Mexican national, joined EEV as its full-time investment officer in September 2001. Based in Cambridge and collaborating closely with EEV's executive director, Mr. Rojas has significant responsibilities for sourcing, executing, and monitoring EEV loans. Mr. Rojas has worked in both the for-profit and nonprofit sectors. Prior to joining EEV, he held positions as an equity analyst with UBS Warburg in Mexico, as a metals industry analyst at CRU International in the U.K. and the U.S., and as a consultant to the Soros Foundation in Mongolia and the United Nations in Ethiopia. Mr. Rojas holds a B.A. in international relations and economics from the University of Pennsylvania and an M.A. in international business and finance from Columbia University. He is fluent in Spanish, English, and French.

Sebastián Charchalac, Portfolio Monitor and Field Coordinator

Mr. Charchalac serves as a loan monitor and field coordinator for EEV, as well as regional representative for EcoLogic Development Fund, EEV's parent non-profit. He is responsible for overseeing on-the-ground activities in Latin America. An agricultural engineer and a member of the Quiché Mayan ethnic minority group, Mr. Charchalac is based in Quetzaltenango, Guatemala. He works with EEV's and EcoLogic's Latin American partner organizations to assist local groups with strategic planning, proposal development, and community organizing. He also provides technical support for production and marketing activities of small-scale agricultural enterprises. Mr. Charchalac has extensive experience working with indigenous community groups and non-governmental organizations operating at the local, regional, and national level. He has held positions with the UN Food and Agriculture Organization, the World Health Organization, USAID, the European Union, and many private sector organizations. He has an M.S. in agricultural engineering from the University of San Carlos in Guatemala.

Shaun Paul, Executive Director, EcoLogic Development Fund

As co-founder and executive director of EcoLogic Development Fund (EcoLogic), Mr. Paul dedicated 10 percent of his time to EEV in 2001. He has 12 years of experience in rural Latin American economic development, environmental protection, and natural resource management. Prior to launching EcoLogic, he was employed as a field representative for social service organizations working in Central America. Mr. Paul has held positions with the United Nations Non-Governmental Organisation Liaison Service, the United Nations Development Programme, and the Inter-American Foundation. He has an M.A. in natural resource and development economics from the University of Michigan and a B.A. in international relations from American University. He is fluent in Spanish.

Nancy Natareño, Central American Administrative Assistant

Based in Guatemala, Ms. Natareño serves as EcoLogic's and EEV's Central American administrative assistant. In addition to providing administrative support to the regional coordinator, she also assists local partner organizations in coordinating with government and national non-governmental programs, as well as developing new relationships with prospective partner organizations. Ms. Natareño has a Certificate of Office Management from the Rafael Landivar University in Quetzaltenango and is currently working towards a Licensing Degree in Business Administration. Since 1994, Ms. Natareño has worked as an accountant and a financial secretary with FUNDAP, CONAMA, the Rafael Landivar University, and the Quetzaltenango City Electric Company.

Deborah Fraize, Program Officer for Development, EcoLogic Development Fund Ms. Fraize serves as a program officer to secure program funding for EcoLogic's projects and partners. Ms. Fraize currently devotes 10 percent of her time to EEV to provide assistance in fundraising and investor/donor relations. She came to EcoLogic from the Conservation Law Foundation, where she was a fundraiser for its marine and rivers programs. Prior to CLF, she spent a number of years in the securities industry. Over the years, she has volunteered at a variety of non-profits — ranging from a pelican rehabilitation program in southern California to the Harvard Square Homeless Shelter in Cambridge. She holds a B.A. in political science from Framingham State College and an M.A. in marine policy from the University of Rhode Island.

Beth Freeman, Program Assistant, EcoLogic Enterprise Ventures

Ms. Freeman serves as EEV's program assistant. Prior to joining EEV, Ms. Freeman worked as an assistant to the development office and missions department at Combined Jewish Philanthropies in Boston. She holds a B.S. from Muhlenberg College, where she studied mathematics and economics. While attending Muhlenberg, Ms. Freeman led a Fair Trade coffee awareness campaign that enabled fair trade coffee to be sold on campus.

EEV's Board of Directors

Deborah Drake, Senior Director and Special Assistant to the President of ACCION International Deborah Drake sits on the EEV Board of Directors and serves as its treasurer. ACCION International is a non-profit organization located in Somerville, Massachusetts, dedicated exclusively to microfinance through its network of affiliate organizations in Latin America and the United States. Prior to her current position, Ms. Drake worked for seven years in the Capital Markets Department where she managed the Bridge Funds, ACCION's guarantee funds that are used to facilitate access to bank loans by ACCION's associates. Before joining ACCION, she was a banking specialist in the Financial Policy and Systems Division of the World Bank and a loan officer in a commercial bank in Washington, D.C.

Tammy Newmark, Fund Manager, EcoEnterprise Fund (The Nature Conservancy)
Tammy Newmark manages the EcoEnterprise Fund, a \$10 million fund created by The Nature
Conservancy and the Multilateral Investment Fund of the Inter-American Development Bank
that offers venture financing and technical support to environmentally responsible businesses in
Latin America and the Caribbean. Ms. Newmark has an extensive background in venture capital,
private business, and environmental protection. Before joining The Nature Conservancy, she led
TechnoServe Inc.'s environmental business advisory services in Latin America and Africa. Prior
to that, she was a co-founder and vice president of the Environmental Enterprises Assistance
Fund, a non-profit venture capital fund that established organizations specializing in
environmental investments in Indonesia, the Philippines, and Latin America. In addition, she has
worked for the International Finance Corporation in Washington, D.C., and Chase Manhattan
Bank in New York. Ms. Newmark holds an A.B. degree from Smith College and an M.B.A.
from the Wharton School of the University of Pennsylvania.

Jean Steege, Green Leaf Composting

Ms. Steege is a member of EEV's Board of Directors and serves on its investment committee. Currently working as a financial consultant to Green Leaf Composting in Boston, Ms. Steege has an extensive background in development finance in Latin America. From 1994 to 1999, she worked for ACCION International in the Latin America Operations Division and Research and Development department. Ms. Steege spent four years living and working in South America as manager of ACCION's microcredit operations in Bolivia. Having previously held positions at Merrill Lynch and Deloitte and Touche, she received a B.A. from Yale University and an M.B.A. from the Wharton School of the University of Pennsylvania.

Jonathan Rosenthal, JUST WORKS-Fair Trade Consulting

Jonathan Rosenthal sits on the EEV Board of Directors and serves on its investment committee. Mr. Rosenthal was a co-founder and, until June 2000, the executive director of Equal Exchange, a highly regarded pioneer in the fair trade business. Since importing its first container of coffee in 1986, Equal Exchange expanded to become the largest fair trade certified organization in North America, generating more than \$6 million in annual sales. Equal Exchange pays small-scale farmer co-ops in Latin America, Africa, and Asia a guaranteed minimum price for their coffee, while cutting out brokers and other middlemen to deliver the coffee directly from tree to table.

W. Russell G. Byers, Jr., Principal, R. K. Mellon and Sons

Mr. Byers serves on EEV's Board of Directors and sits on its investment committee. He is also co-founder and chairman of the EcoLogic Development Fund, EEV's parent organization. Formerly an equity analyst at Brown Brothers Harriman in New York, Mr. Byers is now a private investor living and working in Manhattan. A member of the Mellon family, and involved in his families' organized philanthropies, Mr. Byers has been active in support of social and environmental causes for many years. He holds a bachelor's degree in English from Skidmore College.

Phil Covell, Managing Director for Business Development Services—Stichting Triodos PV Partners

Mr. Covell is a member of EEV's Board of Directors and also serves on its investment committee. He currently works as managing director for business development services of Stichting Triodos PV Partners (the advisor to Solar Development Group), which provides business expertise and expansion capital for photovoltaic enterprises in developing countries. He also serves on the board and executive committee of Enersol Associates, Inc., an international development organization based in Chelmsford, Massachusetts, that promotes the use of solar energy in educational and health applications in Latin America. Mr. Covell received his Bachelor of International Studies from the School for International Training of Brattleboro, Vermont, holds an M.B.A. from the University of California at Davis, and is fluent in Spanish.

David Crocker, First Vice President – Investments, Salomon Smith Barney, Inc.

Mr. Crocker sits on EEV's and EcoLogic's Board of Directors and is a financial consultant with particular interest and specialization in socially responsible investing. In the 1970s, Mr. Crocker pioneered the idea of Community Funds, where individuals with inherited wealth pool their philanthropic resources and work with community leaders to fund programs in the environment,

social justice, women's rights, disarmament, and peace. Today, the network of Community Funds, which he co-founded, serves 26 states and has developed into one of the largest sources of funds for cutting-edge community organizing in the United States. Mr. Crocker is a founding board member of Green Seal, Inc., a national organization currently working to develop environmental standards and a seal of Environmentally Approved Labeling for consumer products. He is also a member of the Social Investment Forum and the Social Venture Network.